

USAWC STRATEGY RESEARCH PROJECT

**THE FUTURE GEO-STRATEGIC  
IMPLICATIONS OF THE HIV/AIDS  
CRISIS IN SOUTH AFRICA**

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This SRP is submitted in partial fulfillment of the requirements of the Master of Strategic Studies Degree. The views expressed in this student academic research paper are those of the author and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.

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## ABSTRACT

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South Africa is identified by the United States as an anchor country and a benchmark example of democratic reform and economic success. However, while serving as an example for regional countries on progressive success towards economic, political and democratic reform, South Africa is struggling with a significant underlying problem that if not resolved could result in the country becoming a failed state: the HIV/AIDS epidemic. The purpose of this paper is to evaluate United States policy and interests towards South Africa and determine its relevance in preventing the regionally destabilizing humanitarian crisis threatened by the pervasive effects of the HIV/AIDS epidemic on the country. This paper additionally examines the costs, risks and future geo-strategic implications of the HIV/AIDS crisis on South Africa if adequate resources are not programmed and initiatives are not implemented to immediately resolve the crisis.







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## FUTURE GEO-STRATEGIC IMPLICATIONS OF THE HIV/AIDS CRISIS IN SOUTH AFRICA

### INTRODUCTION

Changes in the global security environment have refocused the National Security Strategy of the United States of America towards the prosecution of a global war on terror (GWOT). This war focuses on eliminating terrorist threats that endanger the security and welfare of the United States, a security that is synonymous with regional stability. Stable regions ensure the protection of U.S. national interests through the promotion of the ideals of freedom and choice and engender environments for homogeneous cooperation and commitment towards common goals. Conversely, U.S. national security is threatened by instability abroad and its effect on a nation's ability to govern and protect itself from its enemies—terrorists and organizations that exploit the vulnerabilities of weak or failing states. The United States therefore seeks to establish the foundations for successful regional strategies that foster stability and security.

In Africa, the U.S. policy focuses on three interlocking strategies: bilateral engagement and building coalitions of the willing by focusing on *anchor* countries; coordinating through regional or sub-regional organizations with the intent of promoting constructive conflict mediation; and developing successful African national capabilities to execute peace operations.<sup>1</sup> The biggest challenge faced by nation-states on the African continent is the instability that can occur due to disease, war, or poverty raging out of control. One or more of these elements have caused weak countries in Africa to fail. However, failure of an important *anchor* or pivotal country threatens the failure of U.S. policy for the continent writ large thus defeating efforts in support of “a *core value* of the United States—preserving human dignity—and the country's number one *strategic priority*—combating global terror.”<sup>2</sup> In order to prevent such crises, the United States has committed to “working with other nations for an African continent that lives in liberty, peace, and growing prosperity.”<sup>3</sup>

In Sub-Saharan Africa, South Africa is identified as an *anchor* country and a benchmark example of democratic reform and economic success; it is a lead nation in the region and fulfills an integral role in ensuring regional peace, stability, and security. However, current U.S. policy vis-à-vis South Africa is at risk for failure; the country is struggling with a significant underlying crisis that if not resolved could thrust South Africa into a humanitarian plight with potentially destabilizing regional effects. The Human Immunodeficiency Virus (HIV)/ Acquired Immunodeficiency Syndrome (AIDS) epidemic is projected to expand in South Africa to alarming proportions over the next ten-to-fifteen years. The high predicted rates of contagion, prevalence, and death concurrent with the growing number of orphans created portend a dire and overwhelming health and social welfare crisis that will divert the South African

Government's focus from economic development, leading the region in democratization, and promoting regional stability and security. In order to resolve this crisis and avoid the failure of South Africa, the United States must implement aggressive initiatives now and provide significant resources for educational, prevention, and treatment programs such as those that provide for public information, free counseling, purchase and free distribution of condoms, for the ill, the provision of antiretroviral (ARV) drugs or highly active antiretroviral therapies (HAARTS).

The purpose of this paper is to evaluate United States policy and interests towards South Africa and determine its relevance in preventing the regionally destabilizing humanitarian crisis threatened by the pervasive effects of the HIV/AIDS epidemic on the country. This paper additionally examines the costs, risks and future geo-strategic implications of the HIV/AIDS crisis on South Africa if adequate resources are not programmed and initiatives are not implemented to immediately resolve the crisis.

## **BACKGROUND**

The positive relations that exist today between the United States and the Republic of South Africa are only just entering a second decade. Throughout the Apartheid years, the United States maintained an official presence in South Africa. However, relations were hindered and strained by the South African Government's adherence to policies that emphasized white domination while extending racial separation.<sup>4</sup>

The Apartheid form of government originated in the 1940's with the Afrikaner National Party as a means to cement white control over the economic and social sectors of the country. The central features of this form of government included: "racial classification, separate political units for each race with colored and indians given limited, and blacks no political voice in the national government;" racial laws that created separate living areas and limited the types of labor were strictly enforced.<sup>5</sup> The cooperative relationship between the United States and South Africa began after 1991 when the government abolished laws pertaining to the "pillars of Apartheid (Land Tenure, Rural Planning and the Chieftancy)."<sup>6</sup> With the transition to black majority rule and the election of President Nelson Mandela in 1994, U.S.-South African relations expanded and now focus on promoting the goals established by the U.S.-South Africa Bi-national Commission in the areas of: "trade and investment, agriculture, human resources development and education, conservation and the environment, energy and technology, and defense."<sup>7</sup>

South Africa's geographic and economic importance in the region derives from its size, population, and abundant natural resources. Its economy accounts for "40% of Sub-Saharan Africa's total gross domestic product (GDP), and excluding oil imports, for 60% of U.S. trade with Africa and one-quarter of U.S. capital investment in the region."<sup>8</sup> In 2002, two-way trade amounted to 6.6 billion dollars.<sup>9</sup> Its labor force, by occupation, is 30% agricultural, 25% industrial, and 45% service-oriented.<sup>10</sup> South Africa possesses "well-established financial, legal, energy and transportation systems, and a stock market that ranks among the ten largest in the world."<sup>11</sup> It is also the world's largest producer of platinum, gold, and chromium.<sup>12</sup> Other industries include automobile assembly (the second-largest industrial employer in the country),<sup>13</sup> metalworking, machinery, textile, iron and steel, chemicals, fertilizers, and foodstuffs.<sup>14</sup>

Today, the Republic of South Africa is identified as the most advanced democracy in Sub-Saharan Africa and is categorized as a middle-income developing country.<sup>15</sup> However, the current unemployment rate is estimated to exceed 40% with half of all the families living in poverty;<sup>16</sup> the most affected families continue to be from the black majority.<sup>17</sup> "Apartheid left millions of blacks with little education and no trades. Nearly 60% of those who are jobless have never worked, according to the National Labor and Economic Development Institute."<sup>18</sup> One important goal of the state is thus to redress the imbalance of wealth distribution caused by racially segregationist policies enforced during the Apartheid years. Through a process of reconciliation, the South African Government has made progress in transitioning the country and ameliorating the resentment and oppression caused by years under the Apartheid Government. Figure 1 illustrates the South African demographic distribution and the racial population density in the country.<sup>19</sup>

The effect of HIV/AIDS on the economy is oppressively burdensome. Although South Africa possesses a highly lucrative natural resource capability and an associated competitive industrial base, the percentage of people living with HIV/AIDS, estimated at 12 to 13% of the population of 44 million South African's are infected and by 2005, this rate could reach 15%.<sup>20</sup> This is officially the largest absolute number of HIV infection in any country in the world.<sup>21</sup> This situation presents a significant challenge for the government to develop and maintain national industries and encourage foreign investment.<sup>22</sup> To punctuate the disquieting levels of contagion and the concomitant impact on the industrial base, a recognized business practice is to engage in "replacement employment," that is the hiring of "at least two employees for every one skilled position, assuming that one of the employees will succumb to HIV/AIDS."<sup>23</sup> It is therefore no surprise that the South African Government recently declared HIV/AIDS its top priority.<sup>24</sup>



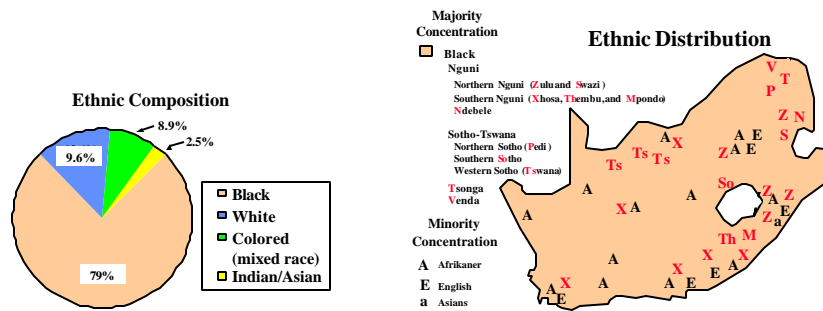


FIGURE 1. DEMOGRAPHIC COMPOSITION AND RACIAL POPULATION DENSITY

## US INTERESTS IN SOUTH AFRICA

The United States' strategic national objectives in South Africa are to strengthen, encourage, or support: "(1) democratic and political institutions; (2) economic development programs and majority private enterprise; (3) political institutions that improve education, health, shelter and urban development; (4) increases in U.S. trade and investment; (5) participation in and support for peacekeeping and conflict resolution in Africa; (6) programs designed to counter or eliminate international criminal and illicit narcotics; and (7) denial of territorial or infrastructure access to terrorists."<sup>25</sup>

As a key nation, South Africa is a "pivotal state;" i.e., it is a state "so important that its collapse would spell transboundary mayhem: migration, communal violence, pollution, etc. Its steady economic progress and stability, on the other hand, would bolster its region's economic vitality, political soundness, and benefit American trade and investment."<sup>26</sup> As part of our Africa policy, South Africa's success and viability are critical. Our assistance and support thus center around three interests: security, economic, and value-based. South Africa is a member of the South African Development Community (SADC); politically, it is an active and a leading African state in the African Union (AU). In both organizations, South Africa exercises key leadership positions and has actively fomented the resolution "of various conflicts and political crises on the African continent, including those in Burundi, the Democratic Republic of Congo, the Comoros, and Zimbabwe."<sup>27</sup> The South African National Defence Forces' (SANDF) are a key instrument in the support and resolution of these regional contingencies. The U.S. supports the SANDF through: security and peacekeeping capability and interoperability-enhancing programs, security assistance, and assistance with organic educational programs intended to address HIV/AIDS prevention. The South African Government continues to cooperate in the GWOT by

freezing terrorist financing networks, addressing immigration, air and seaport security, and surrendering known terrorists to the United States.<sup>28</sup> Economically, South Africa's trade with the U.S. is the largest for Sub-Saharan Africa resulting in over \$2.4 billion dollars in exports in 2002.<sup>29</sup> Additionally, over 800 U.S. companies invest in South Africa employing over 100,000 people and through corporate responsibility programs, spend approximately R1.5 Billion (\$225 million dollars) per year in the country.<sup>30</sup> Finally, the U.S. assists national public health departments establish disease surveillance and research systems, and provides \$40 million dollars annually for HIV/AIDS related programs.

## **THE CAUSES OF HIV/AIDS IN SOUTH AFRICA**

In the dawn of the 21<sup>st</sup> Century, the world finds itself facing a health crisis of severe and long-term global implications. The HIV/AIDS pandemic affects the global population without discrimination, mostly targeting the poor and uneducated people of the Third World. No place is this effect more pervasive than in Africa, home to thirty million of the forty-two million HIV/AIDS infected worldwide.<sup>31</sup> Sandra Thurman, the Director of the U.S. Office of National AIDS Policy compellingly states:

By any and every measure – AIDS is a plague of Biblical proportion. And it is claiming more lives in Africa than in all wars waging on the continent combined. But unlike other wars, it is women and children that are increasingly caught in the crossfire of this relentless epidemic.<sup>32</sup>

The causes of HIV/AIDS infection are many. HIV/AIDS is propagated by behavioral or labor-incidental activities; the overarching causes are high poverty and unemployment rates and migration for employment (i.e., agricultural or commercial sex work), or as a result of employment (i.e., truck drivers). The low education levels and lack of aggressive informational programs cause more risk-taking behavior to occur such as having unprotected sex, multiple sexual partners, and disregard for safe-sex practices such as use of condoms. The low and disadvantaged status of women in society limits their ability to protect themselves in sexual relationships and find themselves exposed to the disease by the grazing habits of their husbands.<sup>33</sup>

Geography plays a key role in the spread and sustainment of the high HIV/AIDS prevalence rates in South Africa. As per Figure 2, Namibia, Lesotho, Botswana, Zimbabwe, Swaziland, Malawi, and Mozambique possess the highest HIV/AIDS adult prevalence rates in Sub-Saharan Africa. "According to UNAIDS, at the end of 2001, in a single year, nearly 15 million people in southern Africa were living with HIV/AIDS, and an estimated 1.1 million people, most of them adults in their most productive years, have died of the disease."<sup>34</sup> The cross-borer

areas with high mobility rates among truck drivers, migrant workers, and commercial sex workers are the most heavily affected by the disease.<sup>35</sup> Migration, migratory labor, or cross-border movements are high-risk activities that serve as the artery that feeds the disease into the geographical body of Southern Africa. Compounding movement is the food shortage and drought that threatens the region and results in population dislocations.

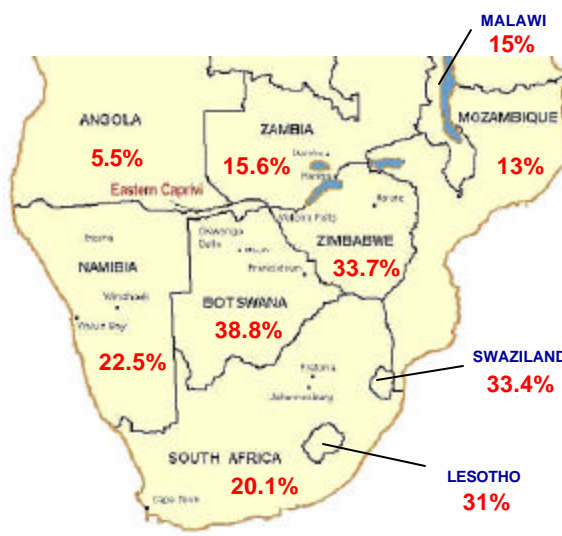


FIGURE 2. HIV/AIDS DEMOGRAPHIC FOR THE ADULT POPULATION (AGES 15-49)

### THE IMPACT OF HIV-AIDS IN SOUTH AFRICA

The impact of the HIV/AIDS crisis on the South African population is projected to continue to escalate. More importantly, the adverse effect of the disease on the productive elements of society, the teachers, laborers, farmers, is reaching critical levels.<sup>36</sup> Blacks, making up the majority of the population and still recovering from the effects of generational Apartheid policies, are the most affected and susceptible to the HIV/AIDS epidemic.<sup>37</sup>

The number of people currently living with HIV/AIDS is estimated to range between 5-6 million; 20.1% of the population between the ages of 15 and 49 years old is now infected.<sup>38</sup> AIDS claims 600 lives per day in South Africa, this year 220,000 are expected to die if not treated. AIDS is now the principal cause of death in the country and accounts for 40% of the mortality rate.<sup>39</sup> It is important to note that co-infection with diseases such as malaria and tuberculosis are also causal contributors to the high HIV/AIDS mortality rates.

Over the last 12 years, HIV *prevalence* in South Africa, or *the percentage of a group who is infected at a particular point in time*, rose significantly. For example, the prevalence rate in pregnant women rose during this time period from less than 1% to more than 25%.<sup>40</sup> This percentage will become evident when the children infected by HIV-positive mothers are identified. Unfortunately, the HIV/AIDS epidemic has not reached the maturation point in South Africa. This disease is on the rise and is expected to peak in the year 2010.

The impact to the population and the future health and social challenges facing the government are best depicted in terms of “long waves of HIV/AIDS (Figure 3).”<sup>41</sup> Viewing the HIV/AIDS epidemic in terms of *waves* accurately represents the consistent and expected ripple effect that one factor can have in a given area; that factor is the disease and the area is South Africa. The *First Wave* refers to the people that were newly infected. This number peaked in 1998 at about 930,000 people infected that year. The *Second Wave* is discussed in terms of “*prevalence*.” This is the present number of people infected with HIV. The number is expected to peak in 2006 with seven or eight million people infected. The *Third Wave* represents the total number of AIDS deaths. This number is expected to peak in 2010 at about 800,000 deaths

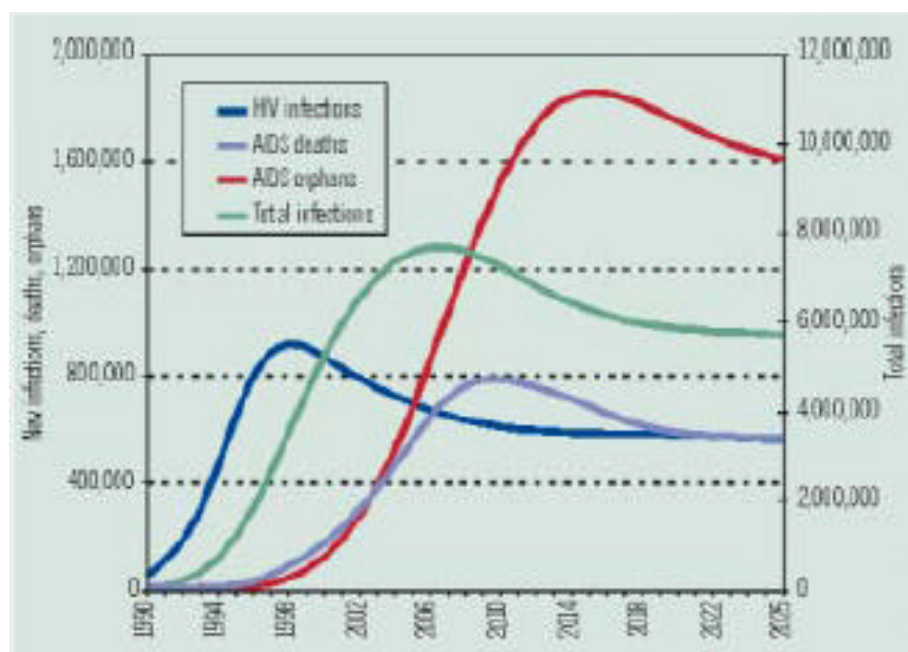


FIGURE 3. THE “LONG-WAVES” OF HIV/AIDS<sup>42</sup>

projected that year. The *Fourth Wave* relates to the number of orphans that will be created as a result of the disease. This number is expected to peak in 2015 at about 1.85 million.

By 2020, the largest HIV/AIDS infected group will continue to be associated with the productive element of the labor force, or those between the ages of 15-49 years old. Empirical data also indicates that young women are disproportionately infected, equating to over 31% of when compared against 13% of young men.<sup>43</sup> High contagion and concurrent death rates will create a population imbalance affecting those aged 0-15 who will make-up over 50% of the population by the year 2020. An alarming consideration is the proportionate number of orphans and HIV/AIDS-positive orphans generated by the disease that are imbedded in this latter figure. Additionally, the ability of the country to heal itself through reproduction will be significantly impaired by the expected reduction in the population of healthy and sexually mature women.

The current population growth rate in South Africa is negative and this course is not expected to change unless aggressive governmental education, prevention and treatment programs are implemented. The primary cause of the trend is attributed to the high mortality rates associated with HIV/AIDS. Figure 4 is the U.S. Census Bureau's prediction model for

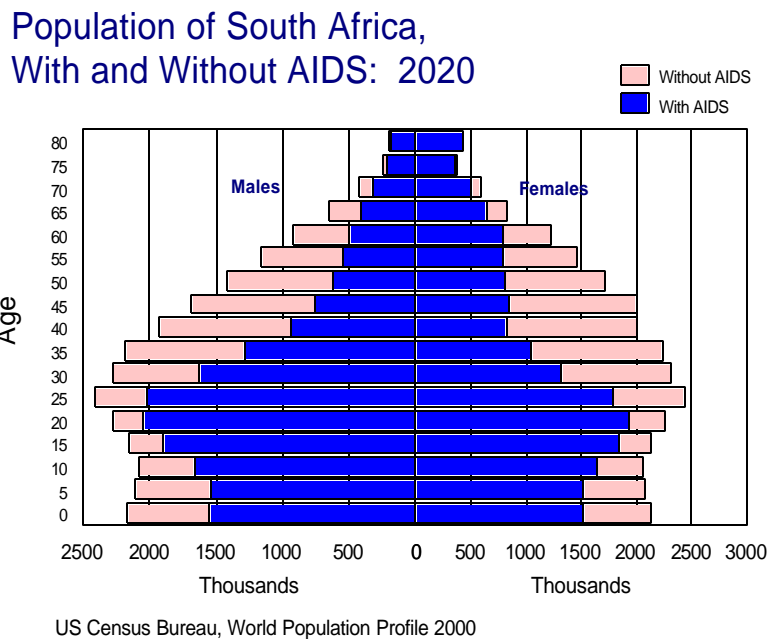


FIGURE 4. POPULATION PREDICTION MODEL 2020

population demographics in the year 2020, based on the year 2000's HIV/AIDS prevalence rates.<sup>44</sup> These projections indicate that the population of the country will be reduced by 18% in 2020 and by 26% in the year 2050.<sup>45</sup>

### ECONOMIC COSTS OF HIV/AIDS

The HIV/AIDS epidemic imposes heavy burdens on the state in terms of economic, health, or social costs. In economic terms, the epidemic will affect South Africa's gross domestic product (GDP). GDP is defined as the total value of goods and services produced by the residents of a nation during one year.<sup>46</sup> The United Nations has estimated that HIV/AIDS will "knock .3 to four percent growth rate each year, making South Africa's GDP in 2010 17 % (or \$22 billion dollars in today's prices) lower than it would have otherwise been."<sup>47</sup> In terms of the health costs of HIV/AIDS to the national government, the figure can be simply extrapolated using the U.S. Agency for International Development (USAID)'s net present value of treatment, currently estimated at approximately \$600/year per HIV-positive victim<sup>48</sup>, and multiplying this figure by the projected HIV/AIDS rate of 2006 of 7-8 million victims. The cost to the state in 2006 would therefore range between \$4.2 and \$4.8 billion dollars. Finally, the burden of the disease on the state can be viewed in terms of the "AIDS Tax."<sup>49</sup>

This "tax," as represented in Figure 5, is the aggregate cost of new infections in terms of increased medical expenses, decreased productivity, and other expenditures associated with

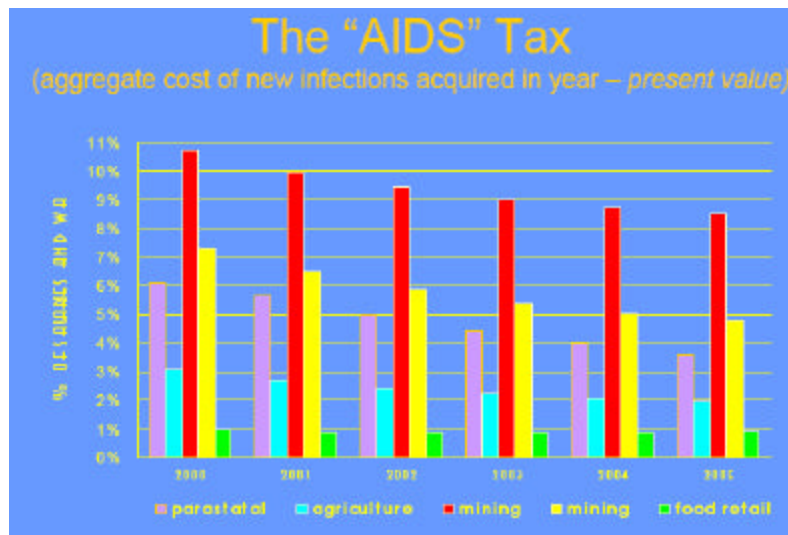


FIGURE 5. THE "AIDS TAX"

HIV/AIDS in the work force as a percentage of the total labor costs, identified in the chart as the “percentage of salaries and wages.”<sup>50</sup> The study from which the below chart was generated took place between 1999 and 2001 and analyzed the impact of AIDS on six corporations, four of which were subsidiaries of transnational corporations based in South Africa and Botswana. The companies were considered large by the “standards of developing countries, reporting sales of between \$35 million and \$3.4 billion at the time of the study. They operated in six industries—mining, metals processing, utilities, agribusiness, retail, and media—and employed between 500 and 35,000 people each.”<sup>51</sup> This study identified grim statistics for these companies, who requested to remain anonymous: the prevalence of HIV ranged from 7.9% (one in twelve workers) to 29% (one in three workers).<sup>52</sup>

A single source database to support statistical assertions related to the overall economic impact of the HIV/AIDS epidemic on the South African labor force is difficult to find due to the migratory nature of the most affected labor sectors, and the fact that the workforce is drawn in part from neighboring countries. Studies have identified the transportation, mining, and security sectors as intrinsically migratory. The transportation sector is studied in terms of the trucking industry and its requirement to move frequently across borders with multiple overnight rest stops for the drivers. The mining sector attracts workers to the high pay labor industries of precious metals, ores and gemstones – a commodity that is plentiful in South Africa. Lastly, the security sector includes both the military and the police functions. The high risk behavior is a result of the absence of the controlling structure of family units; families do not accompany these workers and when combined with high unemployment rates and the disproportionately high imbalances between wage earners, those segments requiring money to subsist become prey to the economic realities: “sex for many women in South Africa is a financial transaction of necessity, even in domestic relationships, which leaves them powerless to negotiate safer sex.”<sup>53</sup> This reality contributes to the iterative exposure-contagion cycle of the disease.

Challenges related to the quantitative measurement and study of the impact of the disease on the labor force is ascribed to two key factors: the stigma of HIV/AIDS and the associated official governmental reaction. The stigma of the disease is also reflected in the government’s reticence in recognizing the disease’s pervasiveness and unwillingness to measure the comprehensive effect of the disease on country. The government’s failure to publicly identify HIV/AIDS as a problem and its willingness to withhold the promulgation of the little data that is available are also indicative of the stigma of the disease on the state. In some recent instances, obstructionist tactics have been attributed to the South African Government

with intent to delay publication of related studies due to concerns about the state's security and potential detrimental effect of the studies on the industrial and tourism sectors of its economy.<sup>54</sup>

HIV and the onset of AIDS, AIDS-related illnesses, and deaths will adversely affect the skilled worker's infrastructure by eliminating a significant percentage of the work force without a known replacement source. This will significantly diminish the state's ability to sustain itself through industrial and agricultural production, to generate income through taxes and long-term foreign investment, and to provide essential public, health and social services to its populace. Figure 6 illustrates the impact of HIV/AIDS on the work force,<sup>55</sup> and the reality that "unskilled and skilled workers were two to three times more likely to be infected than supervisors and managers."<sup>56</sup>



FIGURE 6. HIV PREVALENCE IN THE WORKFORCE

#### THE INDUSTRIAL SECTOR

A series of studies conducted on a limited number of migratory labor groups assess the HIV/AIDS impact on the mining and transportation sectors. One such study is quoted in the book entitled the *New and Critical Security and Regionalism*: "one survey conducted in Carltonville found that out of 88,000 miners from South Africa, Lesotho, Malawi and Mozambique that worked in a gold mine near Johannesburg, 60% were HIV positive. 75% of the 400-500 sex workers that worked for these miners were also found to be HIV positive."<sup>57</sup> Another study measuring the impact of HIV/AIDS on the transportation sector placed the number of infected truck drivers at 56% with an equal number of sex workers infected.<sup>58</sup>



## THE SECURITY/DEFENSE SECTOR

The SANDF is estimated to have an exceptionally high prevalence of HIV/AIDS. The SANDF, comprised of four services, army, air force, navy, and medical, has an officially acknowledged rate of HIV/AIDS of approximately 17%<sup>59</sup>. 50% of soldiers between the ages of 23 and 29 are identified as HIV positive.<sup>60</sup> However, these initial figures are suspect due to the known governmental practice of denying the pervasiveness of the disease; actual figures can be presumed to be classified due to possible strategic vulnerability that it presents to the security arm of the country. Figures reported in the open press place the infected numbers at 60-70% of the total SANDF population.<sup>61</sup> Others assess the level of infection by province; the highest infected province is KwaZulu-Natal with an infection rate estimated to be as high as 90%.<sup>62</sup>

The 1998 UNAIDS Study entitled "AIDS and the Military," identified the causes for the high incidence of infection in militaries in terms of: mission, deployability of the force, and the inherent traits of the profession. Peacekeeping, one of the primary missions of the SANDF and one that the United States is cultivating through programs such as military-to-military contacts serves as an example of risk posed to the SANDF. Peacekeeping missions result in long-term postings to countries and areas that are similarly contending with high HIV/AIDS rates. These postings attract a large number of sex workers, many of whom are HIV positive. The absence of traditional cultural control mechanisms such as families when combined with loneliness, stress, and the availability of money and the unavailability of spending venues, provide opportunities for risk-taking behavior, a *sine qua non* concept of the military ethos.

## THE PUBLIC/SOCIAL WELFARE SECTOR

HIV/AIDS overwhelmingly affects the poor, and when combined with the added burden of losing the primary breadwinner in the family, or devoting scarce resources to caring for the ill, the outcome inevitably thrusts these families deeper into poverty. Affected households compared to their neighbors are larger and poorer with lower employment rates. The care and feeding of these families is compromised and the responsibility falls to those much younger or older than the ill members of the household. In surveyed homes, incomes and expenditures were 14-26% lower than in households with no ill members.<sup>63</sup> HIV/AIDS and poverty are mutually reinforcing conditions. Iris Boutros states in her study entitled "The socio-economic and demographic impact of the HIV/AIDS epidemic in South Africa," that:

Health and income have a mutually reinforcing relationship that can become a 'virtuous' or 'vicious' spiral. Health improves economic growth; economic growth improves health. Similarly, poverty causes poor health; poor health worsens poverty.<sup>64</sup>

The wide-spread contagion of HIV/AIDS throughout the labor force has had an increasingly adverse effect on the public sector; Figure 7 depicts the percentage of affected government employees in the provincial, health care, and educational sectors.<sup>65</sup> The health care system is and will continue to be heavily affected by its own high rate of infection and the associated costs of providing basic services to the growing number of sick and dying. The number of people seeking public sector assistance in the areas of social welfare is expected to continue growing in order to meet the future demands of the AIDS' *second* (prevalence), *third* (deaths), and *fourth* (orphans) wave peaks.



FIGURE 7. HIV PREVALENCE IN GOVERNMENT EMPLOYEES

The impact on the governmental support systems as identified in the *fourth wave* represents a duplicative burden on the state. This number is currently estimated to reach 1.85 million by the year 2015.<sup>66</sup> It is also important to note that many of these orphans will be HIV-positive themselves having been infected prenatally or through mother's milk. Additionally, the orphans can be expected to be socially-challenged by the experiences of having grown up marginalized by the stigma of the disease, the spiral of poverty, little-to-no adult care or oversight, and no formal education. These children "will raise themselves in the streets, often turning to crime, drugs, commercial sex, and gangs to survive promoting the spread of HIV."<sup>67</sup> The possibilities of juvenile crime and reduced literacy will increase the burdens for the state.<sup>68</sup> The concept of "child-headed households" is now becoming a reality ascribed as an ancillary by-product of the HIV/AIDS crisis and a government that has done very little to implement social and public welfare support programs.<sup>69</sup> In extreme cases, orphaned young children aged 7-10

are left to care and feed younger siblings. The concerns raised by this social reality reflect on the current state of affairs vis-à-vis the HIV/AIDS epidemic in the country, and present a real future challenge for the government. These children do not have the wherewithal to identify appropriate social mores and norms or reinforce these practices on their siblings. The end result is a young state that through this significant portion of its population has developed new accepted social modalities.

### **COST OF TREATMENT**

The cost of HIV/AIDS treatment for the average South African citizen is prohibitive. The World Bank places the cost for HAARTS per patient in low income countries at approximately \$2400 per year.<sup>70</sup> Another study conducted by USAID placed the cost of ARV treatment at \$600 per year. The per capita income in South Africa is approximately \$10,000 (purchasing parity) per year with approximately 50% of the population living below the poverty line.<sup>71</sup> The country's annual per capita expenditure on health care is less than \$5.00.<sup>72</sup> When treatment costs are combined and then contrasted against the purchasing parity rates, treatment is beyond the average South African's reach.

### **NATIONAL PROGRAMS TO COMBAT HIV/AIDS IN SOUTH AFRICA**

The immediate post-Apartheid concerns related to the issue of HIV/AIDS generated a series of discussions that led to the establishment of several national organizations and programs designed to address the disease. Beginning in 1991 with the establishment of the National AIDS Committee of South Africa (NACOSA), and culminating in 2000 with the launching of the National AIDS Council's "National HIV/AIDS and Sexually Transmitted Illnesses (STI) Strategic Plan (2000-2005), the government demonstrated commitment towards tackling the disease. The new STI Strategic Plan identified the four pillars for the national treatment program: prevention; treatment, care and support; human and legal rights; and monitoring, research and surveillance. This plan and the government's focus continue to be weighted towards prevention and behavioral changes and are silent on the question of ARVs."<sup>73</sup> However, and in spite of these efforts, what began as a laudably progressive governmental effort has quickly come into question due to the perceived lack of commitment and support attributed to the current Mbeki Administration.

The South African Government continues to be criticized for its failure to commit resources and to rapidly implement programs to deal with the HIV/AIDS epidemic. The national governmental trend to diminish the impact HIV/AIDS can be illustrated by comments made President Thabo Mbeki that generated extreme criticism and embarrassed his party after he

denied the impact of the disease by disingenuously stating that the high mortality rates in South Africa were a result of external causes such as accidents, suicides, and homicides, not AIDS.<sup>74</sup> In another notable instance, the same administration questioned the toxicity of ARV treatments. Both of the cases represent real, public messages that are accepted as seminal truth by some sectors of the South African society that either do not have access to factual information or choose to deny the reality of the pervasiveness of HIV/AIDS.

Nonetheless, the government has succumbed to internal and external pressures and set into motion a landmark decision that would have provided free ARV treatment in all state hospitals.<sup>75</sup> This policy was intended to supplement the World Health Organization's 3X5 Plan; a plan designed to provide ARV treatment to 3 million Africans by the year 2005.<sup>76</sup> The South African Government's First Phase of the plan would have supplied 53,000 people with ARV treatment beginning in March 2004, with a goal of providing treatment to 1.4 million people within five years.<sup>77</sup> This goal will do little to ameliorate the HIV/AIDS crisis when comparing the 1.4 million person target against the estimated number of infections in 2010, which is expected to be approximately seven million. Moreover, and in spite of internal and external calls for action, the government has failed to initiate Phase I.

#### **U.S. ASSISTANCE PROGRAMS TO SOUTH AFRICA**

The Bush Administration recognizes the real threat of the HIV/AIDS epidemic and has committed U.S. resources to assist in the global fight against the disease. The programs established for which South Africa qualifies include the Millennium Challenge Account (MCA), the Emergency Plan for AIDS Relief, and the International Mother and Child HIV Prevention Initiative. The United States has also pledged support to international AIDS organizations such as the United Nations' Global AIDS Fund and the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM). However, the pledged support fails to meet the minimum required monies to affect the HIV/AIDS prevalence threshold.

These current policies and assistance programs are not designed to eradicate the HIV/AIDS epidemic as a fundamental course of action to forestall the threat posed by the pandemic to regional security in Africa. Within the context of the U.S. strategic policy in Africa, a key priority is to "combat the HIV/AIDS pandemic, and through bilateral engagement, to promote health and education."<sup>78</sup> Bilateral engagement and the promotion of health and education activities do not equate to treatment, the only known effective solution to the HIV/AIDS pandemic; these activities target the causes of the disease. Furthermore, aid programs linked to these activities are constrained by their inherent tenets: assistance is

related to country-specific progress towards market-based economies, rule of law, free trade, and human rights. The MCA programs are designed to reward nations for their performance towards tangible economic progress; combating the HIV/AIDS epidemic is subsumed under “progress towards market-based economies” supporting the theory that economic growth improves health and the ability of the state to provide care for its citizens.

The Global AIDS Fund, the Emergency Plan for AIDS Relief, and the International Mother and Child HIV Prevention Initiative commit \$15 billion dollars over the next five years to address the epidemic and will focus on the 14 hardest hit countries.<sup>79</sup> However, funding is still too limited and too diffused to have an effect on the epidemic. In 2003, for example, the assistance to South Africa provided through the U.S. Embassy was \$95 million dollars; \$40 million dollars went to HIV/AIDS-related programs.<sup>80</sup> Additionally, it is also difficult to provide money to a country that does not recognize HIV/AIDS as a problem. This denial is present in President Mbeki’s actions and statements, and further supported by the South African Minister of Finance’s statement to the GFATM that “South Africa did not need more funds to combat the HIV/AIDS epidemic.”<sup>81</sup>

Funds budgeted or committed by the government, private sector and the international communities to combat HIV/AIDS in South Africa are inadequate. These programs target sub-labor or fragments of the country’s population as a whole. One such program is provided by the automotive industry’s Volkswagen/Audi. While the intent is socially responsible, the purpose is to ensure that the profit-margin for the company is not endangered by the effects of the disease on its work force. This assistance does little to assist family members in the throes of the disease or other less fortunate employees not associated with these treatment-providing companies. The high levels of contagion, the lack of education and awareness, and the behavioral causes of the disease suggest that anything other than aggressive and comprehensive national and international efforts will fail to prevent the spread of the disease or reduce its high rate of prevalence in the South Africa.

#### **FUTURE IMPLICATIONS OF HIV/AIDS**

South Africa is on the verge of failing as a state. In his article entitled “Engaging Failing States,” Chester A. Crocker links state failure with “internal strife and humanitarian crisis that can spread from localized unrest to national collapse then regional destabilization.”<sup>82</sup> Daniel Thuerer defines the elements that characterize the legal and political aspects of a failed state in terms of geography or territory, political, or functional collapses. These elements are expanded and inform that:

*Geographical or territorial collapse* occurs when the internal and endogenous problems that result in the implosion rather than an explosion of the structures of power and authority. These actions further result in the disintegration and destructuring of a state rather than its dismemberment. The *political collapse* refers to the internal disintegration of the security structures of government, i.e., law and order. The *functional collapse* is ascertained with the absence of bodies capable, on the one hand, of representing the State at the international level and, on the other, of being influenced by the outside world.<sup>83</sup>

South Africa is a dying state. "Never before – not even when the bubonic plague ravaged Europe in the Middle Ages – has there been a disease as devastating to mankind as the current HIV/AIDS pandemic. Unlike many other diseases, HIV/AIDS does not kill the young and the old. Instead it targets primarily those who are in the prime of their lives, those who are often in occupations vital to the economic development and stability of their nations."<sup>84</sup> The projected impact of the HIV/AIDS epidemic in the country, if aggressive steps are not taken now to treat the disease, is ominous. The high number of infected, dead or dying, and the number of orphans created will severely impair the state's ability to care firstly for the ill, secondly for the remainder of the population, and finally for itself. This health epidemic will be exacerbated by the aggregate weight imposed by the combined strain of skilled and non-skilled worker voids in critical areas such as agriculture, mining, transportation, health and security. The resultant effects of the disease will increase budgetary needs at the same time it shrinks the tax base.<sup>85</sup>

The ability of the state to protect itself internally and externally will be severely challenged by the high prevalence of HIV/AIDS throughout the country and the concomitant effect on the government security forces. Countries focused on dealing with the ramifications of internal strife cannot defend against openings within their national borders that create "ungoverned" areas. These areas are so far removed by either distance or circumstance that the state government cannot change or control developments that threaten its security. This situation opens venues for terrorists and other opportunistic organizations to infiltrate and establish operating structures. This opening becomes a blind spot that is exploited by terrorists, weakens susceptible states, and undermines regional stability and security. Instability ultimately threatens the security of the United States and its citizens both at home and abroad.

The inability of the government to develop and commit to policies preventing the further spread of the disease and the provision of treatment for those afflicted will result in increased polarization of the "have and have nots." This disease does not just attack the weak and incapable segments of the population; it affects the productive elements of a society leaving the weak to care for the dying. The number of old, young, orphans and unemployed will add to the growing instability of the country. As the number of able-bodied agricultural workers declines,

relative to the mouths to feed, malnutrition rates will increase and create the potential for famine. This combination presents overwhelming strains on the social infrastructure, famine, and distress by an already impoverished and ignored segment of the South African society that will result in internal conflict.

HIV/AIDS threatens the stability of a state by weakening internal governmental structures beginning with the most fundamental element, its population. The disease progress out and moves through the public, economic, health and social welfare sectors that are interdependent with and support the individual. The security infrastructure of the state is projected to be equally affected both by the disease and the crumbling of the social welfare entities. Therefore, the ability of the state to protect itself from internal strife and external pressures will be challenged and the resultant final effect will be the collapse of the state.

## **OUTLOOK**

The current U.S. strategic priority of prosecuting the GWOT ignores the creation of failed states that result from the HIV/AIDS pandemic. The U.S. national focus targets immediate threats from organizations or states that support or sponsor terrorism. These terrorist actors operate from regions of the world that serve as “safe havens” for their organizations. These havens exist due to state sponsorship or state failure. State-sponsored terrorism is a target of the United States’ policy and can be illustrated through the examples of Afghanistan and Iraq.

The possibility of the failure of South Africa in the next fifteen years is a probability that cannot be prevented without aggressive economic assistance programs. This disease does not generate the same sense of urgency or level of national commitment that the immediate GWOT does. The United States, for example, will have spent more on Operation Iraqi Freedom during the first year, than its has projected to spend on global HIV/AIDS programs over the next five years. HIV/AIDS is a security threat that endangers the viability of states and regional stability if not combated immediately with adequate resources; the cost of HIV/AIDS treatment for South Africa is estimated in this paper to be approximately \$5 billion dollars per year. This amount represents the combined U.S. Security Assistance funding for Israel and Egypt in any one given year.

South Africa is one of four anchor countries identified in the U.S. National Security Strategy for Sub-Saharan Africa. It is however, arguably the most important country in the region due to its existing mature economic, political and democratic infrastructure. South Africa can serve as an exemplary role model of successful democratic governance, promotion of conflict mediation, participation in peace operations, and leadership in Sub-Saharan regional

organizations. These goals cannot be achieved if the South African Government is internally focused and dealing with an endogenous humanitarian crisis that threatens its very existence. The risks posed by this disease in South Africa threaten to reverse and potentially defeat U.S. foreign policy successes in the region to date. The future geo-strategic implications of a failed anchor state in a region that is challenged by poverty, lack of democratic institutions, disease, and civil wars are disastrous for U.S. policy in Sub-Saharan Africa.

The importance that the United States has assigned South Africa as an anchor state and the associated expectation placed on its economic and political success require full commitment for resolution of the HIV/AIDS pandemic. South Africa can succeed and serve as a stabilizing force in the region and assist other Sub-Saharan countries as an experienced mentor that overcame the problems affecting the continent. The HIV/AIDS pandemic is the number one *known* global challenge; the impact to South Africa is also well-documented, albeit often denied by its government. The resources programmed by the South African government, international organizations, and the United States towards eradicating this epidemic are meager at best. Unless aggressive steps are taken now and a full commitment is made towards resolving the HIV/AIDS epidemic in South Africa and the surrounding countries, the region will fail.

WORD COUNT= 6807





## ENDNOTES

<sup>1</sup> George W. Bush, *The National Security Strategy of The United States* (Washington, D.C.: The White House, September 2002), 8.

<sup>2</sup> The White House, "African Policy" 2003; available from <<http://www.whitehouse.gov/infocus/africa>>; Internet; accessed 7 November 2003.

<sup>3</sup> Ibid.

<sup>4</sup> Cale Daniel Carter, "Computers and the Apartheid Regime in South Africa," date not published; available from <<http://www-cs-students.stanford.edu/~cale/cs201/apartheid.hist.html>>; Internet; accessed 10 February 2004.

<sup>5</sup> Ibid.

<sup>6</sup> Department of State, "Background Note: South Africa: Profile," June 2003; available from <<http://www.state.gov/r/pa/ei/bgn/2898pf.htm>> Internet; accessed 10 February 2004.

<sup>7</sup> Ibid.

<sup>8</sup> Edwin S. Cochrane, "The Pivotal State: Post-Apartheid South Africa," *Parameters*, (Winter 2000-01): 1.

<sup>9</sup> Department of State, "US Mission to South Africa," July 2003; available from <<http://usembassy.state.gov/posts/sf1/wwwfip1a.pdf> >; Internet; accessed 10 February 2004.

<sup>10</sup> CIA World Fact Book, "South Africa," 2003; available from <<http://www.cia.gov/cia/publications/factbook/print/sf.html>>; Internet; accessed 20 January 2004.

<sup>11</sup> Africa Business Pages, "Connecting Africa to the World," *Africa Business Pages, Business Guide, Internet Edition* [journal on-line]; available from <<http://www.africa-business.com/features/southafrica.html>>; Internet; accessed 6 March 2004.

<sup>12</sup> CIA World Fact Book, "South Africa," 2003, available from <<http://www.cia.gov/cia/publications/factbook/print/sf.html>>; Internet; accessed 20 January 2004.

<sup>13</sup> Forbes.com, "German Auto Makers Tackle South Africa AIDS Scourge," 22 January 2004; available from <http://www.forbes.com/business/newswire/2004/01/22/rtr1221795.html>; Internet; accessed 2 February 2004.

<sup>14</sup> CIA World Fact Book, "South Africa," 2003, available from <http://www.cia.gov/cia/publications/factbook/print/sf.html>; Internet; accessed 20 January 2004.

<sup>15</sup> Country Watch, "South Africa 2004 Country Review," *Country Watch* 2004 Edition [journal online]; available from <<http://www.countrywatch.com>>; Internet; accessed 10 February 2004.

<sup>16</sup> Sharon LaFraniere, "Low Labor Standard Leads South Africans to Export Jobs," *The New York Times*, 13 March 2004, sec B, p. 3.

<sup>17</sup> Country Watch, "South Africa 2004 Country Review," *Country Watch* 2004 Edition [journal online]; available from <<http://www.countrywatch.com>>; Internet; accessed 10 February 2004.

<sup>18</sup> Sharon LaFraniere, "Low Labor Standard Leads South Africans to Export Jobs," *The New York Times*, 13 March 2004, sec B, p.3.

<sup>19</sup> Headquarters United States Army Europe and Seventh Army, *Country Profile of the Republic of South Africa* (Heidelberg, Germany: HQUSAREUR, February 2002), 18.

<sup>20</sup> Department of State, "Background Note: South Africa: Profile," June 2003; available from <<http://www.state.gov/r/pa/ei/bgn/2898pf.htm>>; Internet; accessed 10 February 2004.

<sup>21</sup> James Hentz and Morten Boas, *New and Critical Security and Regionalism* (Ashgate Publishing Company, 2003), 98.

<sup>22</sup> Lucia Mutikani, "German Auto Makers Tackle S.Africa AIDS Scourge," 22 January 2004; available from <http://www.forbes.com/business/newswire/2004/01/22/rtr1221795.html>; Internet; accessed 2 February 2004.

<sup>23</sup> Sandra Thurman, *Testimony to the Senate Committee of Foreign Relations Subcommittee on African Affairs – ONAP, 24 February 2000*, Written Testimony Submitted to the Subcommittee on Foreign Relations, Subcommittee on African Affairs. (Washington, D.C.: Office of National Aids Policy, 2000), 2.

<sup>24</sup> UNAIDS, "National Response Brief, South Africa; date not published; available from <<http://www.unaids.org/nationalresponse/result.asp>>; Internet; accessed 17 January 2004.

<sup>25</sup> Headquarters United States Army Europe and Seventh Army, *Country Profile of the Republic of South Africa* (Heidelberg, Germany: HQUSAREUR, February 2002), 3.

<sup>26</sup> Edwin S. Cochrane, "The Pivotal State: Post-Apartheid South Africa," *Parameters* (Winter 2000-01): 1.

<sup>27</sup> Department of State, "Background Note: South Africa: Profile," June 2003; available from <<http://www.state.gov/r/pa/ei/bgn/2898pf.htm>>; Internet; accessed 10 February 2004.

<sup>28</sup> U.S. Embassy, South Africa, "America Invests in South Africa: Law Enforcement and Terrorism," Issue Paper, June 2003.

<sup>29</sup> U.S. Embassy, South Africa, "America Invests in South Africa: Trade," June 2003

<sup>30</sup> Ibid.

<sup>31</sup> Africa Action, "The Color of AIDS: Racism and AIDS in the U.S. and Africa," 2003; available from <<http://www.africaaction.org/action/campaign.htm>>; Internet; accessed 12 January 2004.

<sup>32</sup> Sandra Thurman, *Testimony to the Senate Committee of Foreign Relations Subcommittee on African Affairs – ONAP, 24 February 2000*, Written Testimony Submitted to

the Subcommittee on Foreign Relations, Subcommittee on African Affairs. (Washington, D.C.: Office of National Aids Policy, 2000), 1.

<sup>33</sup> Aids Foundation of South Africa, "Dynamics of the South African Epidemic," date not published; available from <<http://www.aids.org.za/>>; Internet; accessed 10 February 2004.

<sup>34</sup> Country Profile, "HIV/AIDS: Southern Africa," US Agency for International Development, Washington D.C., August 2003.

<sup>35</sup> Ibid.

<sup>36</sup> Ibid.

<sup>37</sup> Boutros, Iris, *The AIDS Epidemic in South Africa*, Expert Report (Boston Massachusetts: Harvard School of Public Health, 28 August 2003), 9.

<sup>38</sup> Population Reference Bureau, "2003 World Population Data Sheet," 2003 (Washington, D.C., PRB, 2003), 4.

<sup>39</sup> Ibid.

<sup>40</sup> Rob Dorrington, Debbie Bradshaw, and Debbie Budlender, "HIV/AIDS Profile in the Provinces of South Africa – Indicators for 2002," Study (Tygerberg, South Africa: Centre for Actuarial Research, Medical Research Council and the Actuarial Society of South Africa, 2002), 1.

<sup>41</sup> Debbie Bradshaw, Leigh Johnson, Helen Schneider, David Bourne, and Rob Dorrington, "Orphans of the HIV/AIDS Epidemic," 2002; available from <<http://www.mrc.ac.za/policybriefs/2policy2002.pdf>>; Internet; accessed 12 January 2004.

<sup>42</sup> Ibid.

<sup>43</sup> Agency for International Development, Country Profile, "HIV/AIDS: Southern Africa," US, Washington D.C., August 2003.

<sup>44</sup> Karen A. Stanecki, *The AIDS Pandemic in the 21<sup>st</sup> Century: The Demographic Impact in Developing Countries* (Washington, D.C.: U.S. Census Bureau), 3.

<sup>45</sup> Population Reference Bureau, "2003 World Population Data Sheet," (Washington, D.C.: PRB), 4.

<sup>46</sup> Marie Curie Action, "The Marie Curie Glossary," available from <[http://europa.eu.int/comm/research/fp6/mariecurie-actions/glossary/glossary\\_en.html](http://europa.eu.int/comm/research/fp6/mariecurie-actions/glossary/glossary_en.html)>; Internet; accessed 4 March 2004.

<sup>47</sup> Country Watch, "South Africa 2004 Country Review," *Country Watch* 2004 Edition [journal online]; available from <<http://www.cocountrywatch.com>> Internet; accessed 10 February 2004, 30.

<sup>48</sup> Neal P. Cohen, "South Africa: Research on the Economic Impact of HIV/AIDS-Complementing Health Interventions," March 2002; available from [http://www.s4\\_research\\_econ\\_impact\\_hiv\\_safrica.pdf](http://www.s4_research_econ_impact_hiv_safrica.pdf); Internet; accessed on 20 February 2004.

<sup>49</sup> Sydney Rosen, Jonathon Simon, William MacLeod, Matthew Fox, Donald M. Thea, "AIDS Is Your Business," *Harvard Business Review*, Vol. 81, No. 1, (February 2003): 1.

<sup>50</sup> Ibid.

<sup>51</sup> Ibid.

<sup>52</sup> Ibid.

<sup>53</sup> Samantha Willan, "Briefing: Recent Changes in the South African Government's HIV/AIDS Policy and It's Implementation," *African Affairs, The Journal of the Royal African Society*, Vol. 103 Number 410, (January 2004): 114.

<sup>54</sup> Raymond W. Copson, *CRS Issue Brief for Congress: AIDS in Africa*, (Washington, D.C.: The Library of Congress, 2003), CRS-9.

<sup>55</sup> Neal P. Cohen, "South Africa: Research on the Economic Impact of HIV/AIDS-Complementing Health Interventions," March 2002; available from [http://www.s4\\_research\\_econ\\_impact\\_hiv\\_safrica.pdf](http://www.s4_research_econ_impact_hiv_safrica.pdf); Internet; accessed on 20 February 2004.

<sup>56</sup> Sydney Rosen, Jonathon Simon, William MacLeod, Matthew Fox, Donald M. Thea, "AIDS Is Your Business," *Harvard Business Review*, Vol. 81, No. 1, (February 2003): 1.

<sup>57</sup> James Hentz and Morten Boas, *New and Critical Security and Regionalism* (Burlington: Ashgate Publishing Company, 2003), 98.

<sup>58</sup> Gita Ramjee and Eleanor Gouws, "Targeting HIV-prevention Efforts on Truck Drivers and Sex Workers," 2001; available from <http://www.mrc.ac.za/policybriefs/3polbrief2000.htm>; Internet; accessed 8 March 2004.

<sup>59</sup> Erica Barks-Ruggles, *Meeting the Global Challenge of HIV/AIDS* (Washington, D.C.: The Brookings Institute, April 2001), 2.

<sup>60</sup> James Hentz and Morten Boas, *New and Critical Security and Regionalism* (Burlington: Ashgate Publishing Company, 2003), 103-104.

<sup>61</sup> Paul Kirk, "Sixty Percent of Army May Be HIV-positive Reports," *The Daily Mail and Guardian*, 31 March 2000, 4.

<sup>62</sup> Ibid.

<sup>63</sup> Max A. Bachman and Frederick L.R. Booyesen, "Health Impact of HIV/AIDS on South African Households: A Cohort Study," 1 April 2003; available from <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=155544>; Internet; accessed 20 Feb 2004.

<sup>64</sup> Iris Boutros, *The Socio-Economic and Demographic Impact of the HIV/AIDS Epidemic in South Africa*, (Boston, Massachusetts: Harvard University, August 2003), IB (C) 1.

<sup>65</sup> Neal P. Cohen, "South Africa: Research on the Economic Impact of HIV/AIDS- Complementing Health Interventions," March 2002; available from <[http://www.s4\\_research\\_econ\\_impact\\_hiv\\_safrica.pdf](http://www.s4_research_econ_impact_hiv_safrica.pdf)>; Internet; accessed on 20 February 2004.

<sup>66</sup> Debbie Bradshaw, Leigh Johnson, Helen Schneider, David Bourne, and Rob Dorrington, "Orphans of the HIV/AIDS Epidemic," 2002; available from <<http://www.mrc.ac.za/policybriefs/2policy2002.pdf>>; Internet; accessed 12 January 2004.

<sup>67</sup> Sandra Thurman, *Testimony to the Senate Committee of Foreign Relations Subcommittee on African Affairs – ONAP, 24 February 2000*, Written Testimony Submitted to the Subcommittee on Foreign Relations, Subcommittee on African Affairs. (Washington, D.C.: Office of National Aids Policy, 2000), 1.

<sup>68</sup> Debbie Bradshaw, Leigh Johnson, Helen Schneider, David Bourne, and Rob Dorrington, "Orphans of the HIV/AIDS Epidemic," 2002; available from <<http://www.mrc.ac.za/policybriefs/2policy2002.pdf>>; Internet; accessed 12 January 2004.

<sup>69</sup> Samantha Willan, "Briefing: Recent Changes in the South African Government's HIV/AIDS Policy and It's Implementation," *African Affairs, The Journal of the Royal African Society*, Vo.I 103 Number 410, (January 2004): 111.

<sup>70</sup> Markus Haacker, *Providing Health Care to HIV Patients in Southern Africa*, (Washington, D.C.: International Monetary Fund, October 2001), 11.

<sup>71</sup> CIA World Fact Book, "South Africa," 2003, available from <http://www.cia.gov/cia/publications/factbook/print/sf.html>; Internet; accessed 20 January 2004

<sup>72</sup> Country Watch, "South Africa 2004 Country Review," *Country Watch* 2004 Edition [journal online]; available from <<http://www.cocountrywatch.com>> Internet; accessed 10 February 2004, 30.

<sup>73</sup> Samantha Willan, "Briefing: Recent Changes in the South African Government's HIV/AIDS Policy and It's Implementation," *African Affairs, The Journal of the Royal African Society*, Vo.I 103 Number 410, (January 2004): 110.

<sup>74</sup> Thabo Mbeki, "On HIV/AIDS Questions," interview by Tim Sebastian, BBC, 6 August 2001.

<sup>75</sup> Nicol Degli Innocenti and James Lamont, "South Africa Slashes Aids Budget by Two-Thirds," *Financial Times*, 2 February 2004.

<sup>76</sup> World Health Organization, "The 3 By 5 Initiative," 2003, available from <<http://www.who.int/3by5/en/>>; Internet; accessed 2 February 2004.

<sup>77</sup> Sharon LaFraniere, "South Africa is Criticized For Delay in AIDS Treatment," *New York Times*, 20 February 2004.

<sup>78</sup> The White House, "African Policy" 2003; available from <<http://www.whitehouse.gov/infocus/africa>>; Internet; accessed 7 November 2003.

<sup>79</sup> Global Partners, "Global AIDS Fund," 2003, available from <[http://www.sextalk.org/global\\_aids\\_fund.shtm](http://www.sextalk.org/global_aids_fund.shtm)>; Internet; accessed 20 January 2004.

<sup>80</sup> U.S. Embassy, South Africa, *America Invests in South Africa: Issue Paper, Public Health*, (Pretoria, South Africa: U.S. State Department, 2003).

<sup>81</sup> Samantha Willan, "Briefing: Recent Changes in the South African Government's HIV/AIDS Policy and It's Implementation," *African Affairs, The Journal of the Royal African Society*, Vol. I 103 Number 410, (January 2004): 113.

<sup>82</sup> Chester A. Crocker, "Engaging Failing States," *Foreign Affairs*, Vol. 82, no. (September/October): 35.

<sup>83</sup> Thuerer, Daniel. "The 'Failed State' and International Law." 25 July 2003, available from <http://globalpolicy.igc.org/nations/sovereign/failed/2003/0725law.htm>; Internet; accessed 7 February 2004.

<sup>84</sup> Lindy Heineken, "AIDS, the New Security Frontier," *Conflict Trends*, April 2000, available from <<http://www.accord.org.za/web.nsf/0/1112bd7a376dd49742256a08002f977d?OpenDocument>>; Internet; accessed 3 February 2004.

<sup>85</sup> P.W. Singer, "AIDS and International Security," *Survival*, Vol. 44, No. 1 (Spring 2002): 147.

## BIBLIOGRAPHY

- Africa Action. *Africa's Right to Health Campaign*. Washington, D.C.: Incorporating the American Committee on Africa. 2003. Available from <<http://www.africaaction.org/action/campaign.htm>>. Internet. Accessed 12 January 2004.
- Africa Growth and Opportunity Act. *US-Sub-Saharan Trade Statistics 2002*. Washington, D.C.: U.S. Department of Commerce. September 2002. Available from <<http://www.agoa.gov/resources/annstats02.pdf>>. Internet. Accessed 13 January 2004.
- Africa Growth and Opportunity Act. *US-Sub-Saharan Trade Statistics 2002*. Washington, D.C.: U.S. Department of Commerce. September 2002. Available from <<http://www.agoa.gov/resources/annstats02.pdf>>. Internet. Accessed 13 January 2004.
- "AIDS to Hit Population Growth in South Africa". *The Age*. Melbourne, Australia: The Age Company Ltd. 21 January 2003. Available from <<http://www.theage.com.au/articles/2003/01/21/1042911363427.html>>. Internet. Accessed 30 January 2004.
- Amoako, K. Y. *Claiming the 21<sup>st</sup> Century: Africa's Agenda*. Washington, D.C.: Center for Strategic and International Studies. 17 February 2000. Available from <<http://www.csis.org/GIICWEB/sppeechAmoako.html>>. Internet. Accessed 7 November 2003.
- Barks-Ruggles, Erica. *Meeting the Global Challenge of HIV/AIDS*. Washington, D.C.: The Brookings Institute. April 2001. Available from <<http://www.brookings.edu/comm/policybriefs/pb75.htm>>. Internet. Accessed 12 January 2004.
- Bachman, Max A. and Frederick L.R. Booysen. "Health Impact of HIV/AIDS on South African Households: A Cohort Study." 1 April 2003. Available from <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=155544>. Internet. Accessed 20 Feb 2004.
- Booker, Salih. *AIDS in Africa: State of Emergency*. Washington, D.C.: Incorporating the American Committee on Africa. September 2002. Available from <<http://www.africaaction.org/action/campaign.htm>>. Internet. Accessed 12 January 2004.
- Booker, Salih. *The Color of AIDS: Racism and AIDS in the U.S. and Africa*. Washington, D.C.: Incorporating the American Committee on Africa. September 2002. Available from <<http://www.africaaction.org/action/campaign.htm>>. Internet. Accessed 12 January 2004.
- Booker, Salih and William Minter. *AIDS in Africa: Is the World Concerned Enough*. New York: Foreign Policy Association. 2002. Available from <[http://www.fpa.org/info-url\\_nocat2402/info-url\\_nocat.htm](http://www.fpa.org/info-url_nocat2402/info-url_nocat.htm)>. Internet. Accessed 7 November 2003.
- Booker, Salih and William Minter. "Global Apartheid." *The Nation*. (21 June 2001). Available from <<http://www.thenation.com/doc.mhtml?i=20010709&s=booker>>. Internet. Accessed 7 November 2003.
- Boonstra, Heather. *U.S. AIDS Policy: Priority on Treatment, Conservatives' Approach to Prevention*. Washington, D.C.: Alan Guttmacher Institute. 3 August 2003. Available from <<http://guttmacher.org/pubs/journals/gr060301.html>>. Internet. Accessed 2 February 2004.



Boutros, Iris. *The Socio-Economic and Demographic Impact of the HIV/AIDS Epidemic in South Africa*. Boston, Massachusetts: Harvard University, August 2003.

Boutros, Iris. *The AIDS Epidemic in South Africa*. Boston Massachusetts: Harvard University August 2003.

Bradshaw, Debbie, Leigh Johnson, Helen Schneider, David Bourne, and Rob Dorrington. "Orphans of the HIV/AIDS Epidemic." 2002. Available from <http://www.mrc.ac.za/policybriefs/2policy2002.pdf>. Internet. Accessed 12 January 2004.

Burkhalter, Holly. "The Politics of AIDS: Engaging Conservative Activists ." *Foreign Affairs* 83 (January/February 2004): 8-14.

Bush, George W. *African Policy*. Washington, D.C. The White House. 2003. Available from <http://www.whitehouse.gov/infocus/africa>>. Internet. Accessed 7 November 2003.

Bush, George W. *Fact Sheet: The President's Emergency Plan for AIDS Relief*. Washington, D.C.: The White House. 29 January 2003. Available from <http://www.whitehouse.gov/news/releases/2003/01/20030129-1.html>>. Internet. Accessed 4 February 2004.

Bush, George W. *The National Security Strategy of the United States of America*. Washington, D.C.: The White House. September 2002. Available from <http://www.whitehouse.gov/nsc/nssall.html>>. Internet. Accessed 12 January 2004.

Bush, George W. *President Promotes New Mother and Child HIV Prevention Initiative*. Washington, D.C.: The White House. 19 June 2002. Available from <http://www.whitehouse.gov/news/releases/2002/06/20020619-3.html>>. Internet. Accessed 4 February 2004.

Bush, George W. *Statement by the Deputy Press Secretary*. Washington, D.C.: The White House. December 2003. Available from <http://www.whitehouse.gov/news/releases/2003/12/20031230-8.html>>. Internet. Accessed 28 January 2004.

Bush, George W. *Transcript: Bush Outlines Mission for African Trip*. Washington, D.C.: The White House. 7 July 2003. Available from <http://usinfo.state.gov/regional/af/potus2003/a3070701.htm> >. Internet. Accessed 5 February 2004.

Carter, Cale Daniel. "Computers and the Apartheid Regime in South Africa." Date not published. Available from <http://www-cs-students.stanford.edu/~cale/cs201/apartheid.hist.html>. Internet. Accessed 10 February 2004.

Catoire, Richard G. "A CINC fro Sub-Saharan Africa? Rethinking the Unified Command Plan." *Parameters* 30. (Winter 2000-01). Available from <http://www.carllisle.army.mil/usawc/Parameters/00winter/catoire.htm> >. Internet. Accessed 6 January 2004.

- Central Intelligence Agency. *The World Factbook: South Africa*. Washington, D.C.: Central Intelligence Agency. 2003. Available from <<http://www.cia.gov/cia/publications/factbook/print/sf/html>>. Internet. Accessed 20 January 2004
- Cochrane, Edwin. "The Pivotal State: Post-Apartheid South Africa." *Parameters*. (Winter 2000-01). Available from <<http://www.carllisle.army.mil/usawc/Parameters/00winter/cochran.htm>>. Internet. Accessed 6 January 2004.
- Cohen, Neal P. "South Africa: Research on the Economic Impact of HIV/AIDS- Complementing Health Interventions." March 2002. Available from <[http://www.s4\\_research\\_econ\\_impact\\_hiv\\_safrica.pdf](http://www.s4_research_econ_impact_hiv_safrica.pdf)>. Internet. Accessed on 20 February 2004.
- Colgan, Ann-Louise. *Hazardous to Health: The World Bank and IMF in Africa*. Africa Action Washington, D.C.: Incorporating the American Committee on Africa. April 2002. Available from <<http://www.africaaction.org/action/sap0204.htm>>. Internet. Accessed 7 November 2003.
- Copson, Raymond W. *CRS Issue Brief for Congress: AIDS in Africa*. (Washington, D.C.: The Library of Congress, 2003.
- Crocker, Chester A. "Engaging Failing States ." *Foreign Affairs* 82 (September/October 2003): 32-44.
- Dorrington, Rob, Debbie Bradshaw, and Debbie Budlender, "HIV/AIDS Profile in the Provinces of South Africa – Indicators for 2002." Tygerberg, South Africa: Centre for Actuarial Research, Medical Research Council and the Actuarial Society of South Africa, 2002.
- The Global Fund to Fight AIDS, Tuberculosis, and Malaria. *The Framework Document of the Global Fund to Fight AIDS, Tuberculosis, and Malaria*. Geneva: The Global Fund to Fight AIDS, Tuberculosis, and Malaria 2001. Available from <<http://www.theglobalfund.org/en/about/how/>>. Internet. Accessed 13 January 2004
- The Global Fund to Fight AIDS, Tuberculosis, and Malaria. *How the Fund Works*. Geneva: The Global Fund to Fight AIDS, Tuberculosis, and Malaria 2001. Available from <<http://www.theglobalfund.org/en/about/how/>>. Internet. Accessed 13 January 2004
- The Global Fund to Fight AIDS, Tuberculosis, and Malaria. *Fighting AIDS, TB and Malaria*. Geneva: The Global Fund to Fight AIDS, Tuberculosis, and Malaria 2001. Available from <<http://www.theglobalfund.org/en/about/fighting/default.asp>>. Internet. Accessed 13 January 2004.
- Glover, K. Daniel. "Brace Yourself, World: A Look At Potential Wars Over Natural Resources." *Atlantic Monthly*. 16 January 2001. Available from <<http://archives.his.com/population-news/population-news.0107/msg00077.html>>. Internet. Accessed 19 January 2004.
- Haacker, Maarkus. *Providing Health Care to HIV Patients in Southern Africa*. Washington, D.C.: International Monetary Fund, October 2001.

Headquarters United States Army Europe and Seventh Army. *Country Profile of the Republic of South Africa*. Heidelberg, Germany, February 2002.

Hentz, James, and Morten Boas. *New and Critical Security and Regionalism*. Burlington: Ashgate Publishing Company, 2003.

Heineken, Lindy. "The Impact of HIV/AIDS on the Security of African States; AIDS: The New Security Frontier." Umhlanga Rocks, South Africa: African Center for the Constructive Resolution of Disputes (ACCORD). April 2000. Available from <<http://www.accord.org.za/web.nsf/0/1112bd7a376dd49742256a08002f977d?OpenDocument>>. Internet. Accessed 3 February 2004.

Innocenti, Nicol Degli and James Lamont. "South Africa Slashes Aids Budget by Two-Thirds." *Financial Times*, 2 February 2004.

Kaplan, Robert. *The Coming Anarchy: Shattering the Dreams of the Post Cold War*. New York: Vintage Books. 2003.

Kaplan, Robert. *The Ends of the Earth: From Togo to Turkmenistan, From Iran to Cambodia, A Journey to the Frontier of Anarchy*. New York: Vintage Departures/Vintage Books. 1997.

Kirk, Paul. "Sixty Percent of Army May Be HIV-positive Reports." *The Daily Mail and Guardian*. 31 March 2000.

LaFraniere, Sharon. "South Africa is Criticized For Delay in AIDS Treatment." *New York Times*, 20 February 2004.

Lyman, Princeton N. and J. Stephen Morrison. "The Terrorist Threat in Africa." *Foreign Affairs* 83 (January/February 2004): 75-86.

Mason, Barry. *CIA Says Africa's AIDS Epidemic is a 'National Security' Issue*. Oak Park, Michigan: International Committee of the Fourth International. 21 June 2000. Available from <<http://www.wsws.org/articles/2000/jun2000/aids-j21.shtml>>. Internet. Accessed 3 February 2004.

Mbeki, Thabo. "On HIV/AIDS Questions." Interview by Tim Sebastian. BBC, 6 August 2001.

Mutikani, Lucia. *German Auto Makers Tackle S.Africa AIDS Scourge*. New York: Forbes.Com. 22 January 2004. Available from <<http://www.forbes.com/business/newswire/2004/01/22/rtr1221795.html>>. Internet. Accessed 2 February 2004.

Population Reference Bureau. "2003 World Population Data Sheet of the Population Reference Bureau, Demographic Data and Estimates for Countries and Regions of the World." Washington, D.C.: Population Reference Bureau. 2003. Available from <[http://www.prb.org/pdf/WorldPopulationDS03\\_Eng.pdf](http://www.prb.org/pdf/WorldPopulationDS03_Eng.pdf)>. Internet. Accessed 7 November 2003.

Powell, Colin L. "Remarks at the United States Sub-Saharan Africa Trade and Economic Cooperation Forum." Washington, D.C.: U.S. Department of State. 9 December 2003.

Available from <<http://www.state.gov/secretary/rm/2003/26990pf.htm>>. Internet. Accessed 4 February 2004.

Ramjee, Gita, and Eleanor Gouws. "Targeting HIV-prevention Efforts on Truck Drivers and Sex Workers." 2001. Available from <http://www.mrc.ac.za/policybriefs/3polbrief2000.htm>. Internet. Accessed 8 March 2004.

Rosen, Sydney, Jonathon Simon, William MacLeod, Matthew Fox, and Donald M. Thea. "AIDS Is Your Business." *Harvard Business Review*, Vol. 81, No. 1, (February 2003).

Stanecki, Karen A. *The AIDS Pandemic in the 21<sup>st</sup> Century: The Demographic Impact in Developing Countries*. (Washington, D.C.: U.S. Census Bureau.

Sherrer, Paul. *One in Eight South Africans HIV-positive*. Oak Park, Michigan: International Committee of the Fourth International. 11 December 1999. Available from <[http://www.wsws.org/articles/1999/dec1999/saf-d11\\_prn.shtml](http://www.wsws.org/articles/1999/dec1999/saf-d11_prn.shtml)>. Internet. Accessed 3 February 2004.

Singer, P.W. "AIDS and International Security." *Survival*, Vol. 44, No. 1 (Spring 2002): 145-158.

South African Government. "Statement of Cabinet on HIV/AIDS." Cape Town, South Africa: Government Communications (GCIS). 17 April 2002. Available from <<http://www.aidsinfo.co.za/templates/set4/ShowArticle.asp>>. Internet. Accessed 24 January 2004.

"South Africa Slashes Aids Budget by Two thirds." *Financial Times*. 2 February 2004. Available from <<http://news.ft.com/servlet/ContentServer?pagename=FT.com/StoryFT/FullStory&c=StoryFT&cid=1073281485936>>. Internet. Accessed 2 February 2004.

Tansey, Geoff and Kath, Rogers, Paul. *Future Causes of Conflict*. London: Peace Pledge Union. 1994. Available from <[http://www.ppu.org.uk/war/future\\_wars.html](http://www.ppu.org.uk/war/future_wars.html)>. Internet. Accessed 27 November 2003.

Thuerer, Daniel. *The 'Failed State' and International Law*. New York: Global Policy Forum. 25 July 2003. Available from <<http://www.globalpolicy.org/nations/sovereign/failed/2003/0725law.htm>>. Internet. Accessed 7 February 2004.

Thurman, Sandra. *Testimony to the Senate Committee of Foreign Relations Subcommittee on African Affairs – ONAP, 24 February 2000*. Written Testimony Submitted to the Subcommittee on Foreign Relations, Subcommittee on African Affairs. Washington, D.C.: Office of National Aids Policy, 2000.

United Nations AIDS. *South Africa: Trends and Prospects*. Geneva: UNAIDS. 2003. Available from <<http://www.unaids.org/nationalresponse/result.asp>>. Internet. Accessed 17 January 2004.

- United Nations AIDS. *Donor Contribution Table 1995-2003*. Geneva: UNAIDS. December 2003. Available from <http://www.unaids.org/en/other/functionalities/ViewDocument.asp?href=http%3a%2f%2fgva-docowl%2fWEBcontent%2fDocuments%2fpub%2fGovernance%2fPCB01%2fCore%25202003en%26%2346%3b.xls>. Internet. Accessed 7 February 2004
- United Nations AIDS. *South Africa: High Level Government Support*. Geneva: UNAIDS. 2003. Available from <http://www.unaids.org/nationalresponse/result.asp>. Internet. Accessed 17 January 2004.
- United Nations AIDS. *South Africa*. Geneva: UNAIDS. 2003. Available from <http://www.unaids.org/en/geographical+area/by+country/south+africa.asp>. Internet. Accessed 17 January 2004.
- United Nations AIDS / World Health Organization. *Joint United Nations Programme on HIV/AIDS (UNAIDS) World Health Organization (WHO)*. Geneva: UNAIDS/WHO. 2003. Available from <http://www.unaids.org/EN/other/functionalities/document.asp?href=http%3A%2F%2Fwww%2Eunaids%2Eorg%2Fhtml%2Fpub%2FPublications%2FIRC%2Dpub06%2FEpi03%5F00%5Fen%5Fhtml%2Ehtm&PDFHRef=&FileSize=120>. Accessed 2 February 2004.
- United Nations AIDS, UNICEF, WHO. "Epidemiological Fact Sheets on HIV/AIDS and Sexually Transmitted Infections." Geneva: UNAIDS, UNICEF and WHO. 2002. Available from [http://www.unaids.org/Unaid/EN/Resources/Publications/Corporate+publications/report+on+the+global+hiv\\_aids+epidemic+2002+.asp](http://www.unaids.org/Unaid/EN/Resources/Publications/Corporate+publications/report+on+the+global+hiv_aids+epidemic+2002+.asp). Internet. Accessed 2 February 2004.
- U.S. Agency for International Development. *Millennium Challenge Account*. Washington, D.C. U.S. Agency for International Development. 14 March 2002. Available from <http://www.usaid.gov/mca>. Internet. Accessed 19 January 2004.
- U.S. Agency for International Development. *Activity Data Sheet: AFR Overview: RSA Overview*. Washington, D.C. U.S. Agency for International Development. 2002. Available from <http://www.usaid.gov/pubs/cbj2003/af/isa/690-005.html>. Internet. Accessed 16 January 2004.
- U.S. Agency for International Development. *Country Profile: HIV/AIDS: Southern Africa*. Washington D.C., August 2003.
- Willan, Samantha. "Briefing: Recent Changes in the South African Government's HIV/AIDS Policy and Its Implementation." *African Affairs, The Journal of the Royal African Society*, Vol. 103 Number 410, (January 2004): 109-117.
- The World Health Organization. *WHO Pushing to Rapidly Scale-up Measures to Fight TB and HIV*. Geneva: World Health Organization. 21 January 2004. Available from <http://www.who.int/mediacentre/releases/2004/pr5/en/>. Internet. Accessed 25 January 2004.